

Claims:

1. A method for producing a photoresist master for an optical information medium comprising the steps of
 - 5 applying a photoresist layer on a substrate,
 - exposing the photoresist layer to a laser beam to form a latent image in the photoresist layer, and
 - developing the latent image to form a protrusion/depression pattern to thereby produce the
 - 10 photoresist master; wherein
 - a light absorbing layer is formed between said substrate and said photoresist layer and in contact with said photoresist layer, and said light absorbing layer exhibits light absorption at the wavelength of said laser beam.
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2. The method according to claim 1 wherein said light absorbing layer contains an organic compound which exhibits light absorption at the wavelength of said laser beam.
- 20 3. The method according to claim 2 wherein the organic compound used is at least one member selected from a photoinitiator, a co-initiator, and a dye.
4. The method according to claim 1 wherein the relation:
 - 25 $t_R / \lambda_E \leq 0.6$
 - is satisfied when said laser beam has a wavelength of λ_E (unit: nm), and said photoresist layer has a thickness of t_R (unit: nm).
- 30 5. The method according to claim 1 wherein the relation:
 - $W_P / \lambda_E \leq 0.9$
 - is satisfied when said laser beam has a wavelength of λ_E (unit: nm), and said protrusion/depression pattern formed in the photoresist layer has a minimum width of W_P (unit: nm).
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6. A method for producing a stamper for an optical information medium by using the photoresist master for an optical information medium produced by the method of claim 1, wherein said method comprises the step of transcribing said protrusion/depression pattern formed in the photoresist layer to a metal film.

7. The method according to claim 6 comprising the steps of forming a nickel thin film on said protrusion/depression pattern formed in the photoresist layer by electroless plating, forming an electroformed film on said nickel thin film, and peeling said metal film comprising said nickel thin film and said electroformed film to thereby produce the metal film having the protrusion/depression pattern transcribed thereto.